

Amendments to the Claims

1 – 25 [Cancelled].

Add new claims 26- 37 as helpfully suggested by the Examiner:

26. A method for separating a polymerase from nucleic acid in a sample comprising:
treating the sample to expose purine bases present in the nucleic acid by a process selected from the group consisting of thermal denaturation, alkaline denaturation and restriction enzyme digestion yielding single-stranded overhangs;
capturing the exposed purine bases of the nucleic acid on a metal chelate matrix, wherein the polymerase does not bind the metal chelate matrix;
separating the polymerase from the metal chelate matrix; and
recovering the polymerase, thereby separating the polymerase from the nucleic acid.

27. The method of claim 26 wherein the polymerase is a thermostable polymerase.

28. The method of claim 27 wherein the polymerase is Taq polymerase.

29. The method of claim 26 wherein the nucleic acid is genomic DNA.

30. The method of claim 26 wherein the sample is a cell lysate.

31. The method of claim 26 wherein the separation is achieved using multi-channel plates.

32. The method of claim 26 wherein the separation is achieved using magnetic particles.

33. The method of claim 26 wherein multiple samples are treated in parallel fashion.

34. The method of claim 26 wherein the metal chelate matrix comprises Cu(II).

35. The method of claim 26 wherein exposing is performed by thermal denaturation followed by quenching in a high salt buffer.

36. The method of claim 34 wherein the high salt buffer comprises 20 mM HEPES and 500 mM NaCl.

37. The method of claim 26 wherein exposing is performed by

thermal denaturation followed by rapid cooling.